

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended): A ferromagnetic p-type single-crystal zinc oxide material ~~consisting essentially of:~~ comprising a single-crystal of zinc oxide that contains
1 to 99 mol% manganese,
a p-type dopant selected from a group consisting of C, N, and oxides thereof, ~~and~~
~~the balance p-type single-crystal zinc oxide,~~
wherein said p-type single-crystal zinc oxide material having a hole concentration of $1 \times 10^{18} \text{ cm}^{-3}$ or more and a low resistance of $1 \Omega \cdot \text{cm}$ or less.

2. (Currently Amended): A ferromagnetic p-type single-crystal zinc oxide material ~~consisting essentially of:~~ comprising a single-crystal of zinc oxide that contains
1 to 99 mol% manganese,
a p-type dopant selected from a group consisting of C, N, and oxides thereof,
an n-type dopant selected from a group consisting of B, Al, In, Ga, Zn, and oxides thereof,
~~and~~
~~the balance p-type single-crystal zinc oxide,~~
wherein said p-type single-crystal zinc oxide material having a hole concentration of $1 \times 10^{18} \text{ cm}^{-3}$ or more and a low resistance of $1 \Omega \cdot \text{cm}$ or less.

3. (Currently Amended): A method for manufacturing a ferromagnetic p-type single-crystal zinc oxide material comprising steps of:

holding a semiconductor substrate within a temperature range of 300-800 °C in a vacuum atmosphere of about 10^{-8} Torr;

supplying an atomic gas from a solid-state source of Zn or Zn oxide and an activated oxygen onto a said semiconductor substrate to grow a single-crystal zinc-oxide thin film on the substrate while an atomic p-type dopant selected from a group consisting of C, N, and oxides thereof and an atomic Mn are supplied all together onto the substrate at a partial pressure of about 5×10^{-7} .

4. (Currently Amended): A method as defined in claim 3, further comprising a step of doping ~~[[the]]~~ an n-type dopant so as to provide a higher concentration of the p-type dopant than that of the n-type dopant.